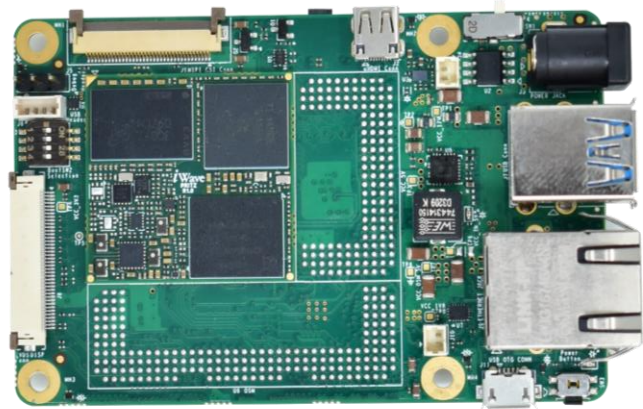


iG-RainboW- G69S

TI AM62Lx

Single Board Computer

The TI AM62Lx SBC offers Dual 64bit ARM Cortex A53 @ up to 1.25GHz. The Single Board Computer definition targeting application that require low power, low costs, and high security. It is rich with TI AM62Lx features along with Gigabit Ethernet PHY, USB2.0, Debug UART Connector, RGB Display Connector, RTC Battery Connector, Expansion Connector and comes in compact 85mm x 56mm form factor.



Highlights

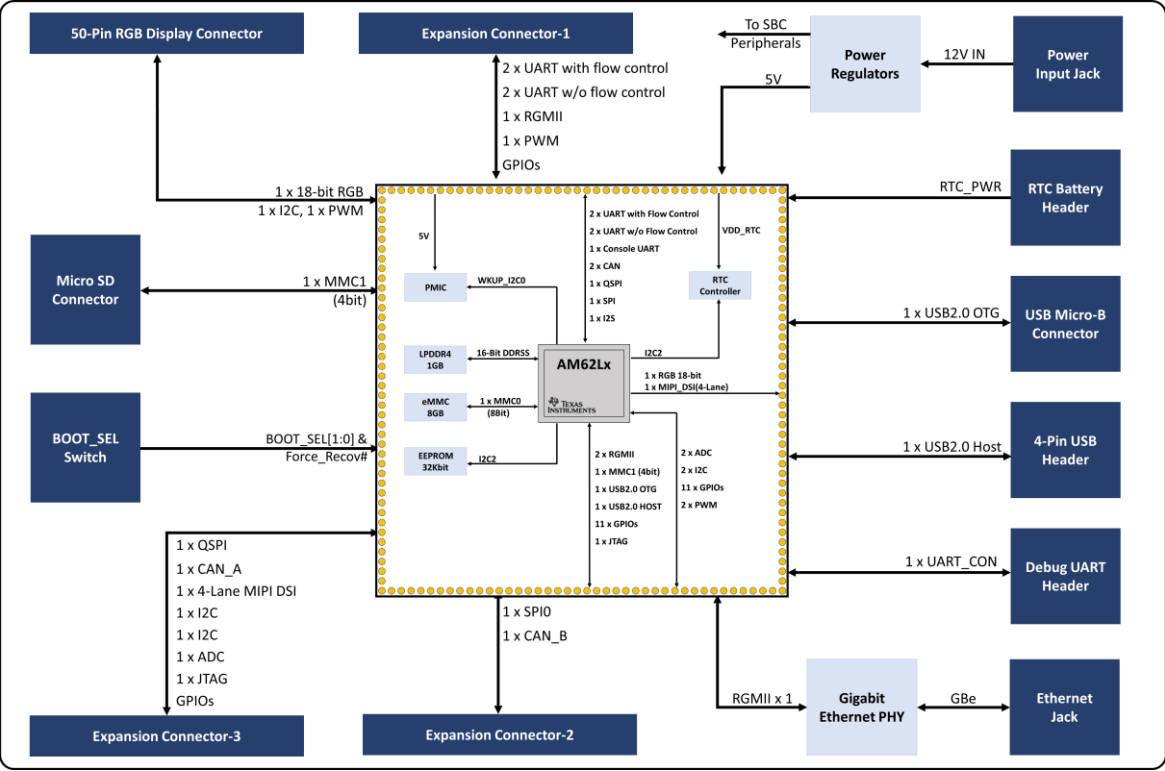
- ❖ AM62Lx with 64-Bit Dual Arm Cortex-A53
- ❖ 1GB LPDDR4 Expandable up to 2GB
- ❖ 8GB eMMC Flash (Expandable)
- ❖ 1000/100/10 Mbps Ethernet
- ❖ 3 x Expansion Connector with support for RGMII, MIPI-DSI, UART, SPI, CAN, PWM, I2S, I2C, JTAG & GPIOs
- ❖ Industrial Grade (-40°C to +85°C)

Ordering Information

iG69S-OSM62L-4L001G-E008G-IAA-ES

AM62LCPU based SBC with 1GB LPDDR4 RAM, 8GB eMMC, Industrial grade

Block Diagram



Technical Specifications

CPU	Dual Core, Arm® Cortex®-A53 @1.25 GHz	Expansion Connector 2 Interfaces	- SPI0 x 1 - CAN_B x 1
Power	TPS65214 PMIC	Expansion Connector 3 Interfaces	- QSPI x 1 - CAN_A x 1 4-Lane MIPI DSI x 1 - I2c x 2 - ADC x 1 - JTAG x 1 - GPIOs
Memory	1GB LPDDR4 Exp. up to 2GB	Miscellaneous Interfaces	- RTC Controller with RTC Battery Header - Debug UART Header
Storage	8GB eMMC Flash 32Kbit EEPROM Micro SD Slot	Operating System	Linux 6.12.13 or (Higher)
Network & Communication	- Gigabit Ethernet PHY Transceiver with RJ45 Magjack Connector - USB 2.0 OTG port through – micro AB Receptacle Connector - USB 2.0 Host x 1 - Debug UART Header x 1	Operating Temp.	-40°C to +85°C (Industrial)
Audio/Video Features	50-Pin RGB Display Connector	Form Factor	85mm x 56mm
Expansion Connector 1 Interfaces	UART with flow control x 2 UART without flow control x 2 RGMII x 1 PWM x 1 GPIOs	Power Input	12V, 2A
		Environment Spec.	REACH & RoHS3 Compliant

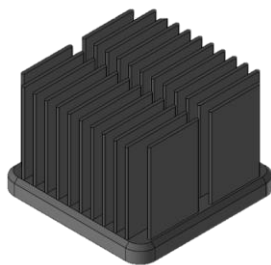
Deliverables

- AM62Lx based SBC
- Thermal Solutions
- Board Support Package

Resources

- Datasheet
- Quick Start Guide
- Linux User Manual

Product accessories



Thermal Solutions

iWave offers heat sink solution for the TI AM62Lx – Based SBC



Power Adapter

12V Power Supply Adapter

Applications

- **Human Machine Interface (HMI)**
Enables seamless interaction between humans & machines in automation and smart systems
- **Medical - Patient Monitoring**
Enhances real-time data collection for better diagnostics and treatment
- **Building Automation**
Improves energy efficiency, security, and control in smart buildings
- **EV Charging Stations**
AM62Lx-powered modules optimize the design and efficiency of EV chargers
- **Solar Energy**
Enables efficient monitoring, storage, and distribution of solar power
- **Smart Secure Gateways & Metering**
Facilitates secure data transmission and edge computing for smart metering
- **Mobile/Industrial Printers**
Enhances efficiency in logistics, manufacturing, and on-the-go printing

A Global Leader in Embedded Systems Engineering and Solutions

Since 1999, we have pioneered leadership in embedded systems technology, establishing ourselves as a strategic embedded technology partner for advanced solutions. Our comprehensive portfolio encompasses ARM and FPGA System on Modules, COTS FPGA solutions, and ODM solutions which include Telematics, Gateways & HMI Solutions.

Beyond our robust product ecosystem, we provide comprehensive ODM support with specialized custom design and manufacturing capabilities, enabling customers to accelerate and optimize their product development roadmaps. With a strategic focus on industrial, automotive, medical, and avionics markets, we deliver innovative technology solutions to global clients.

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